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(FILE 'HOME' ENTERED AT 10:12:05 ON 07 OCT 2004)

FILE 'CAPLUS' ENTERED AT 10:12:31 ON 07 OCT 2004

L1 O S TRIAZOLO? (P) DIFLUORO (P) OXAZOL? (P) PYRIDIN?

FILE 'REGISTRY' ENTERED AT 10:14:18 ON 07 OCT 2004 E 668981-02-0/RN

L2

FILE 'CAPLUS' ENTERED AT 10:14:57 ON 07 OCT 2004

L3 4 S L2

=> d 1-4 bib abs hitstr

ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

2004:589283 CAPLUS

DN 141:140449

TT Preparation of novel crystalline forms of 3-isopropyl-6-[4-(2,5difluorophenyl)oxazol-5-yl]-[1,2,4]triazolo[4,3-a]pyridine.

Kang, Ming; Li, Zheng Jane; Li, Zhengong Bryan; Tao, Yong

Pfizer Inc. USA

U.S. Pat. Appl. Publ., 35 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	US 2004143119	A1	20040722	US 2003-649194	20030827		
PRAI	US 2002-407158P	P	20020830				

This approx AB Crystalline forms of 3-isopropyl-6-[4-(2,5-difluorophenyl)oxazol-5-yl]-[1,2,4]triazolo[4,3-a]pyridine (I) having specified x-ray crystallog., 13C solid state NMR, and differential scanning calorimetry data were prepared Thus,  $N-\alpha$ -tosyl-(2,5-difluorobenzyl)isocyanide (preparation given), 3-isopropyl-1,2,4-triazolo[4,3-a]pyridine-6-carboxaldehyde (preparation given), and K2CO3 were refluxed together for 22 h in MeCN to give 61% I. This was triturated in EtOAc/hexane followed by drying in vacuo at 40° for 48 h to give I form A.

668981-02-0P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP

(preparation of novel crystalline forms of isopropyldifluorophenyloxazolyltriazol opyridine)

RN 668981-02-0 CAPLUS

CN 1,2,4-Triazolo[4,3-a]pyridine, 6-[4-(2,5-difluorophenyl)-5-oxazolyl]-3-(1methylethyl) - (9CI) (CA INDEX NAME)

L3 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

2004:392324 CAPLUS ΑN

DN 140:406810

Preparation of alkyl-[4-(difluorophenyl)-oxazol-5-yl]-triazolopyridines as TIMAP kinases, in particular p38 kinase inhibitors

IN Dombroski, Mark A.; Letavic, Michael A.; McClure, Kim F.

PA Pfizer Inc, USA

SO U.S. Pat. Appl. Publ., 31 pp. CODEN: USXXCO

DT Patent

I.A English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		,			
PI	US 2004092547	À1	20040513	US 2003-649227	20030827
PRAI	US 2002-407088P	P	20020830	•	
OS	MARPAT 140:406810				
GT					
OS GI	MARPAT 140:406810				

AB Title compds. I [wherein Rl = F; n = 2; R2 = alkyl, optionally substituted by halo, OH, alkoxy, and alkoxycarbonyl; with certain compds. absent; their pharmaceutically acceptable salts] were prepared as potent inhibitors of MAP kinases, preferably p38 kinase. For example, II was prepared by Pd-cross coupling of 6-(4-bromooxazol-5-yl)-3-isopropyl-[1,2,4]-triazolo[4,3-a]pyridine (preparation given) with 2,5-diffluoroboronic acid in the presence of TEA/EtOH/H2O. Selected I had an IC50 <10 μM in the TNF-α and MAPKAP in vitro assays, and an EC50 <50 mg/kg in the in vivo TNFα assay. I are useful for treating inflammation, osteoarthritis, rheumatoid arthritis, cancer, reperfusion or ischemia in stroke or heart attack, autoimmune diseases and other disorders.

IT 668981-02-OP, 6-[4-(2,5-Difluorophenyl)oxazol-5-yl]-3-isopropyl[1,2,4]triazolo[4,3-a]pyridine
RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(p38 kinase inhibitor; preparation of alkyldifluorophenyloxazolyltriazolopyr idines as MAP kinases, in particular p38 kinase inhibitors)

RN 668981-02-0 CAPLUS
1,2,4-Triazolo[4,3-a]pyridine, 6-[4-(2,5-difluorophenyl)-5-oxazolyl]-3-(1-methylethyl)- (9CI) (CA INDEX NAME)

- L3 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 2004:203834 CAPLUS
- DN 140:235722
- TI Preparation of 6-[4-(di- or trifluorophenyl)oxazol-5yl][1,2,4]triazolo[4,3-a]pyridine as inhibitors of mitogen-activated protein (MAP) kinases
- IN Dombroski, Mark Anthony; Letavic, Michael Anthony; McClure, Kim Francis
- PA Pfizer Products Inc., USA
- SO PCT Int. Appl., 87 pp.
- CODEN: PIXXD2
- DT Patent

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LA English
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PATENT NO.						KIND DATE		i	APPL	ICAT		DATE						
PI	WO 2	2004020440				- A1		20040311		WO 2003-IB3847						20030819		
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	٠ΚΡ,	KR,	ΚZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	ΝZ,	OM,
			PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,
			ΤZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,
			MD,	RU,	TJ,	TM												
		RW:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	BG,
			CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,
			NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,
			GW,	ML,	MR,	ΝE,	SN,	TD,	TG									
	US 2004053958					A1		2004	0318	US 2003-649236 2003						0030	327	
PRA]	PRAI US 2002-407177P			Р		2002	0830											
OS	MARI	TAS	140:2	2357	22								•					
GI																		

Ι

The present invention relates to novel triazolo-pyridines of the formula (I) [wherein R1 is fluoro; m = 2,3; R2 is C3-6 cycloalkyl optionally substituted by one or two moieties independently selected from the group consisting of halo, C1-4 alkyl, hydroxy, C1-6 alkoxy and C1-6 alkyl-C0-0; or R2 is C1-6 alkyl optionally substituted by one or two moieties independently selected from the group consisting of halo, C1-6 alkyl, hydroxy, Cl-6 alkoxy and Cl-6 alkyl-CO-0; with the proviso that said compound of this formula cannot be 6-[4-(2,4-difluorophenyl)-oxazol-5-yl]-3isopropyl-[1,2,4]triazolo[4,3-a]pyridine or 6-[4-(3,4-difluorophenyl)oxazol-5-yl]-3-isopropyl-[1,2,4]triazolo[4,3-a]pyridine] or pharmaceutically acceptable salt thereof; to intermediates for their preparation, and to pharmaceutical compns. containing them and to their medicinal use. The compds. I are potent inhibitors of mitogen-activated protein (MAP) kinases, preferably p38 kinase. They are useful in the treatment of inflammation, osteoarthritis, rheumatoid arthritis, cancer, reperfusion or ischemia in stroke or heart attack, autoimmune diseases and other disorders. Thus, a mixture of  $[\alpha-(p-toluenesulfonyl)-2,6$ difluorobenzyl]isonitrile (1.79 g, 5.84 mmol), 3-isopropyl-[1,2,4]triazolo[4,3-a]-6-pyridinecarboxaldehyde > (1.10 g, 5.84 mmol), potassium carbonate (1.05 g, 7.59 mmol) and acetonitrile (17.5 mL) was refluxed for 22 h to give, after workup and silica gel chromatog., 6-[4-(2,6-difluorophenyl)oxazol-5-yl]-3-isopropyl-[1,2,4]triazolo[4,3-isopropyl-[1,2,4]triazolo[4,3-isopropyl-[1,2,4]triazolo[4,3-isopropyl-[1,2,4]triazolo[4,3-isopropyl-[4,4]triazolo[4a]pyridine as a yellow solid. A tablet formulation containing 6-[4-(2,5-difluorophenyl)oxazol-5-yl]-3-isopropyl-[1,2,4]triazolo[4,3a)pyridine was prepared, which can be administered to a human from one to four times a day for inhibiting cartilage damage or treating osteoarthritis.

## IT 668981-02-0P

RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (X-ray crystalog. data and polymorphism; preparation of [(di- and trifluorophenyl)oxazolyl]triazolopyridine as p38 kinase inhibitors and therapeutic agents)

## 10649194

668981-02-0 CAPLUS RN

1,2,4-Triazolo[4,3-a]pyridine, 6-[4-(2,5-difluorophenyl)-5-oxazolyl]-3-(1-methylethyl)- (9CI) (CA INDEX NAME)CN

## THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 2' ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ΑN 2004:203832 CAPLUS

DN 140:235721

TI Novel processes and intermediates for preparing [1,2,4]triazolo[4,3a)pyridines

Buzon, Richard Allen Sr.; Castaldi, Michael James; Li, Zhengong Bryan; Ripin, David Harold Brown; Tao, Yong IN

Pfizer Products Inc., USA PCT Int. Appl., 70 pp. PA

SO

CODEN: PIXXD2

DTPatent

LΑ English

FAN.CNT 1																		
	PATENT NO.					KIND DATE			APPLICATION NO.									
PI	WO 20			A2 20040311 A3 20040722			WO 2	003-	IB36		20030818							
	V	۷: AE,																
			CR,															
		GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
		РΗ,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	
			RU,												-			
	F	RW: GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	BG.	
		CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	
			PT,															
			ML,													•	~,	
	US 2004053959				A1		20040318 US 2003-649247						21	00308	327			
PRAI	US 20	002-407	085P		P 20020830													
OS GI	CASRE	EACT 14	0:23	5721	; MAI	RPAT	140	:235	721					-				

$$N = \begin{bmatrix} R^1 \\ N \\ N \end{bmatrix}$$
 $N = \begin{bmatrix} R^4 \\ N \end{bmatrix}$ 
 $(R^3)_m$ 

Ι

The present invention relates and intermediates to a novel process for preparing triazolo-pyridines of the formula (I) [R1 = H, cyano, each (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C3-10 cycloalkyl, Ph, C1-10 heteroaryl, C1-10 heterocyclyl or NH2; R3 = halo, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, perhalo-C1-6 alkyl, Ph, C1-10 heteroaryl, C1-10 heterocyclyl, C3-10 cycloalkyl, HO, C1-6 alkoxy, perhalo-C1-10 alkoxy, PhO, C1-10 heteroaryloxy, C1-10 heterocyclyloxy-C3-10 cycloalkyloxy, C1-6 alkylthio, C1-16 alkylsulfonyl, C1-6 alkylsulfamoyl, amino, mono - or di(Cl-6 alkyl)amino, Cl-6 sulfonylamino, Cl-6 alkyl-carbonylamino, etc.; or two adjacent R2 taken together with the carbon atoms to which they are attached to form a five to six membered carbocyclic or heterocyclic ring; m = an integer from 0-5; R4 = H, F, Cl, R5-B-(CH2)n-; n = n integer from 0-6; B = a bond, (CHR6), O, S, SO2, CO, O-CO, CO-O, CO-NR6, R6N, R6NSO2, R6NCO, SO2NR6, R6NCONR7, O-CONR6 or R6NCO-O; R5 = H, CF3, cyano, each (un)substituted Ph, C1-10 heterocyclyl, C1-10 heteroaryl, or C3-10 cycloalkyl, etc.; R6 = H, C1-6 alkylsulfonyl, C1-6 alkyl] or acceptable salts thereof, e.g., comprising reacting 6-(oxazol-5-yl)[1,2,4]triazolo[4,3-a]pyridines (II) (L = a leaving group and R1 and R4 are as defined above) with phenylboronoic acids (III) and a transition metal catalyst. The compds. I prepared by the methods of the present invention are potent inhibitors of mitogen-activated protein (MAP) kinases, preferably p38 kinase. They are useful in the treatment of inflammation, osteoarthritis, rheumatoid arthritis, cancer, reperfusion or ischemia in stroke or heart attack, autoimmune diseases and other disorders. Thus, 6-(4-bromooxazol-5-yl)-3-isopropyl-[1,2,4]triazolo[4,3a]pyridine (33.0 g, 0.107 mol), 2,5-difluorophenylboronic acid (25.34 g, 0.1605 mol), Pd(PPh3)4 (12.36 g, 0.0107 mol), Et3N (22.37 mL, 0.1605 mol), 2B ethanol (495 mL), and water (33 mL), were added to a 2 L 4 neck round bottom flask (equipped with mech. stirring, nitrogen, heating mantle, temperature controller, and a condenser), stirred while heating to 65 to 70°, and kept stirring overnight at .apprx.70°. Two addnl. difluorophenylboronic acid (8.5 g, 0.054 mol) and Et3N (7.53 mL, 0.054 mol), were added and each time the reaction was allowed to proceed overnight at 70°. Toluene (30 mL) was added and the reaction was allowed to go overnight once again at 70°, treated with H2O (495 mL), and pot-granulated for 4 h at 20 to 25°. The solids were collected by vacuum filtration, washed with 2B ethanol/H2O (50:50) (25 mL of each), and dried in a vacuum oven at  $45^{\circ}$  for 4 ho under full vacuum to afford 14.4 g 3-isopropyl-6-[4-(2,5-difluorophenyl)oxazol-5-yl]-[1,2,4]triazolo[4,3-a]pyridine (40.6% yield, 93.4% purity by HPLC). 668981-02-0P, 6-[4-(2,5-Difluorophenyl)oxazol-5-yl]-3-isopropyl-[1,2,4]triazolo[4,3-a]pyridine RL: IMF (Industrial manufacture); PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of triazolopyridines as p38 kinase inhibitors by Suzuki coupling of phenylboronic acid with (bromooxazolyl)triazolopyridine derivative or cyclocondensation of  $\alpha$ -tosylbenzyl isonitrile with triazolopyridinecarboxaldehyde) RN 668981-02-0 CAPLUS CN  $1,2,4-Triazolo[4,3-a] pyridine, \ 6-[4-(2,5-difluorophenyl)-5-oxazolyl]-3-(1-3-difluorophenyl)-3-(1-3-difluorop$ methylethyl) - (9CI) (CA INDEX NAME)